

## ABSTRACT OF THE DISCLOSURE

A method of manufacturing an optical fiber includes heating at least a portion of an optical fiber preform, drawing an optical fiber at a speed of 500 m/min from the optical fiber preform heated, and  
5 impressing a spin on the optical fiber, while drawing, alternately in a clockwise and in a counterclockwise direction with a predetermined angle. Maximum spatial frequency of the spin per meter  $y$  satisfies  $\exp(24x-12) \leq y \leq 4$  where  $x$  is non-circularity of the cladding in percent. The optical fiber has a relative refractive index difference of 0.3% to  
10 0.5%, and a mode field diameter of 8  $\mu\text{m}$  to 10  $\mu\text{m}$  at a wavelength of 1310 nm. A polarization mode dispersion of the optical fiber manufactured is 0.5 ps/km<sup>1/2</sup> or less at the wavelength of 1310 nm.